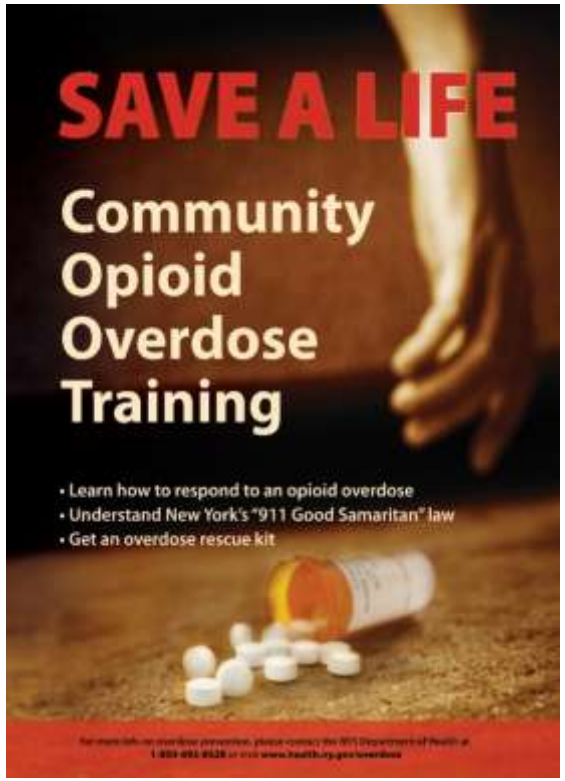
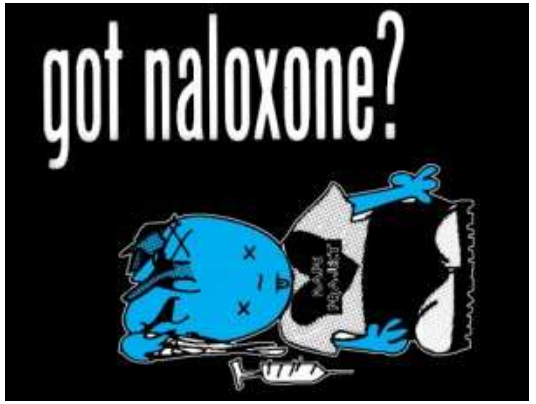
harm reduction COALITION




# First on the Scene: People Who Use Drugs, their Families and their Friends

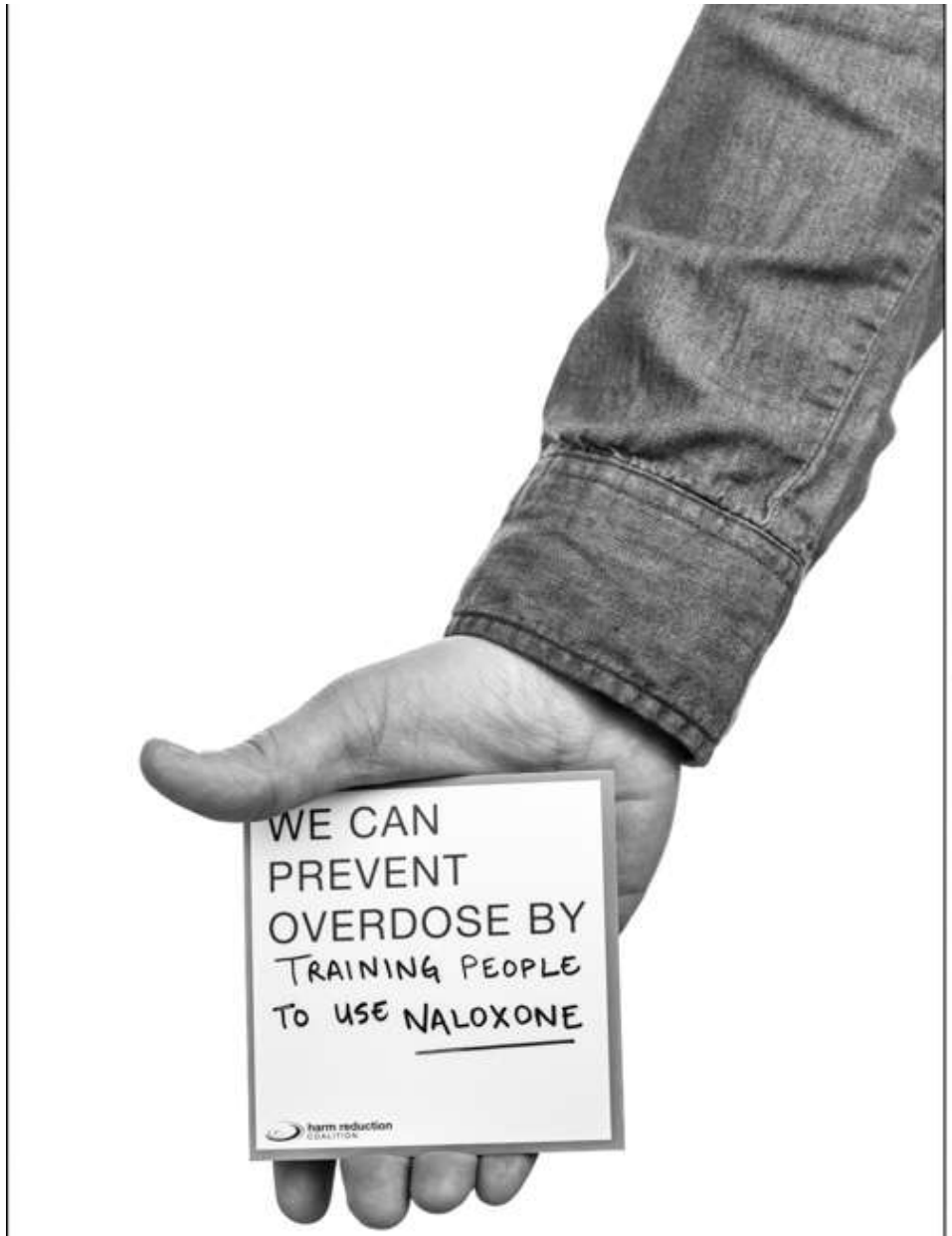


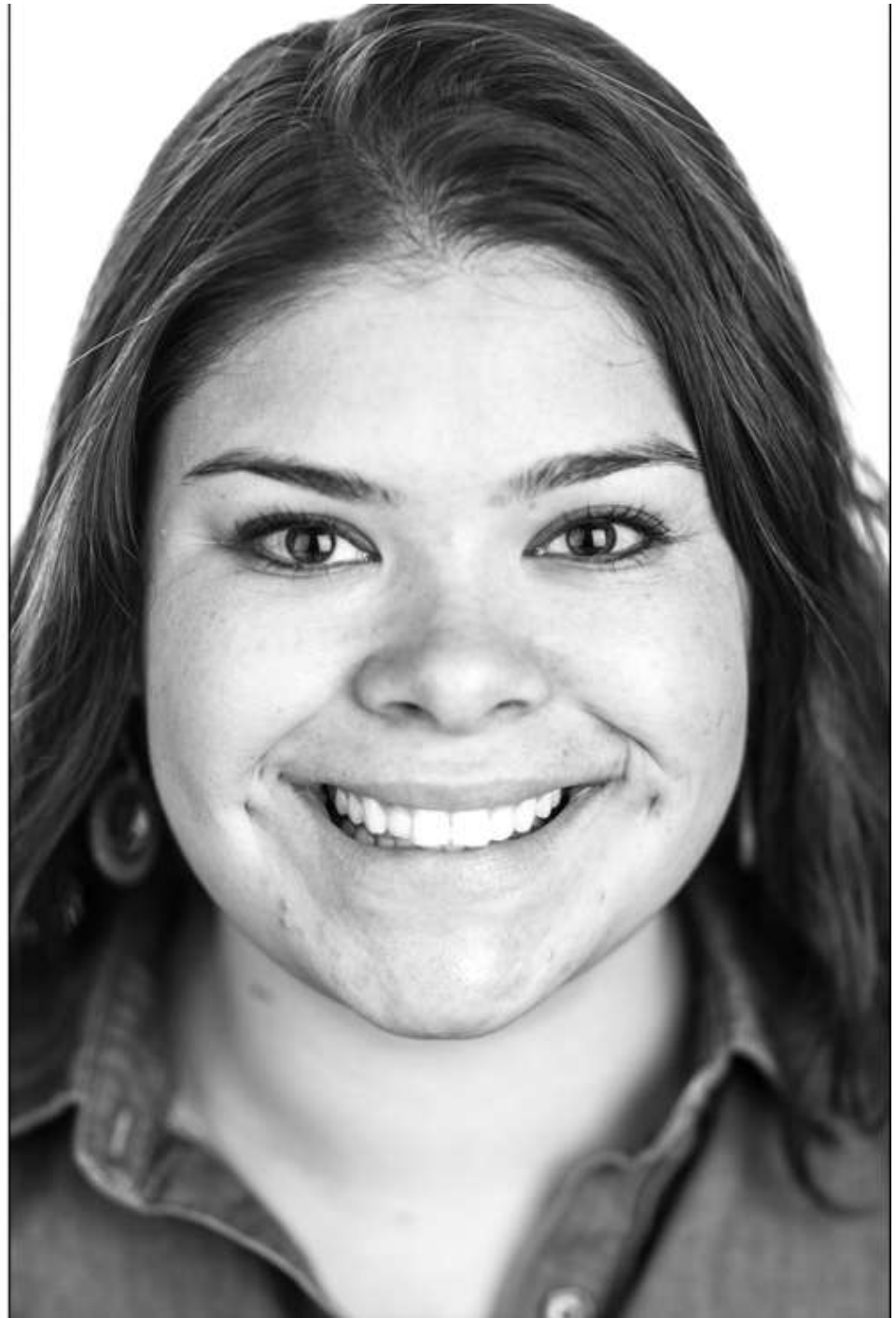


Sharon Stancliff, MD, FAAFP
Harm Reduction Coalition
New York, NY

# A brief history with a common theme

- Chicago 1996: Chicago Recovery Alliance, inspired by over-the-counter naloxone in Italy, began distributing naloxone to syringe exchange program (SEP) participants
- San Francisco 2001: clinical trial at a syringe exchange program leading to ongoing services under SF Department of Public Health in 2003
- New Mexico 2001: passed legislation to target people who use drugs
- Multiple sites across the country setting up services legally and underground
  - New York State, Boston 2006: Public Health Department programs at SEPs
- Bigg & Maxwell, 2002; Seal et al., 2005, Baca 2005, Clark 2014


WE CAN
PREVENT
OVERDOSE BY
TRAINING PEOPLE
TO USE NALOXONE
harm reduction
COALITION



# Finding people who use drugs

- Syringe exchange/access programs
  - Storefronts
  - Outreach vehicles
  - Peer delivered syringe programs
- Drug treatment settings
  - Detoxification units
  - Methadone programs
  - Therapeutic communities
  - 28 day rehabilitation programs

# Training Essentials

- What does naloxone do?
- Overdose recognition
  - Sternal rub/grind
- Action
  - Call EMS and administer naloxone- whichever one is closest should be first
- Hands on practice with device
- Recovery position

# Recommended in most settings

- Risk factors for overdose/ overdose death
  - Loss of tolerance
  - Mixing drugs
  - Using alone
- Good Samaritan Law
- Resuscitation
  - Rescue breathing

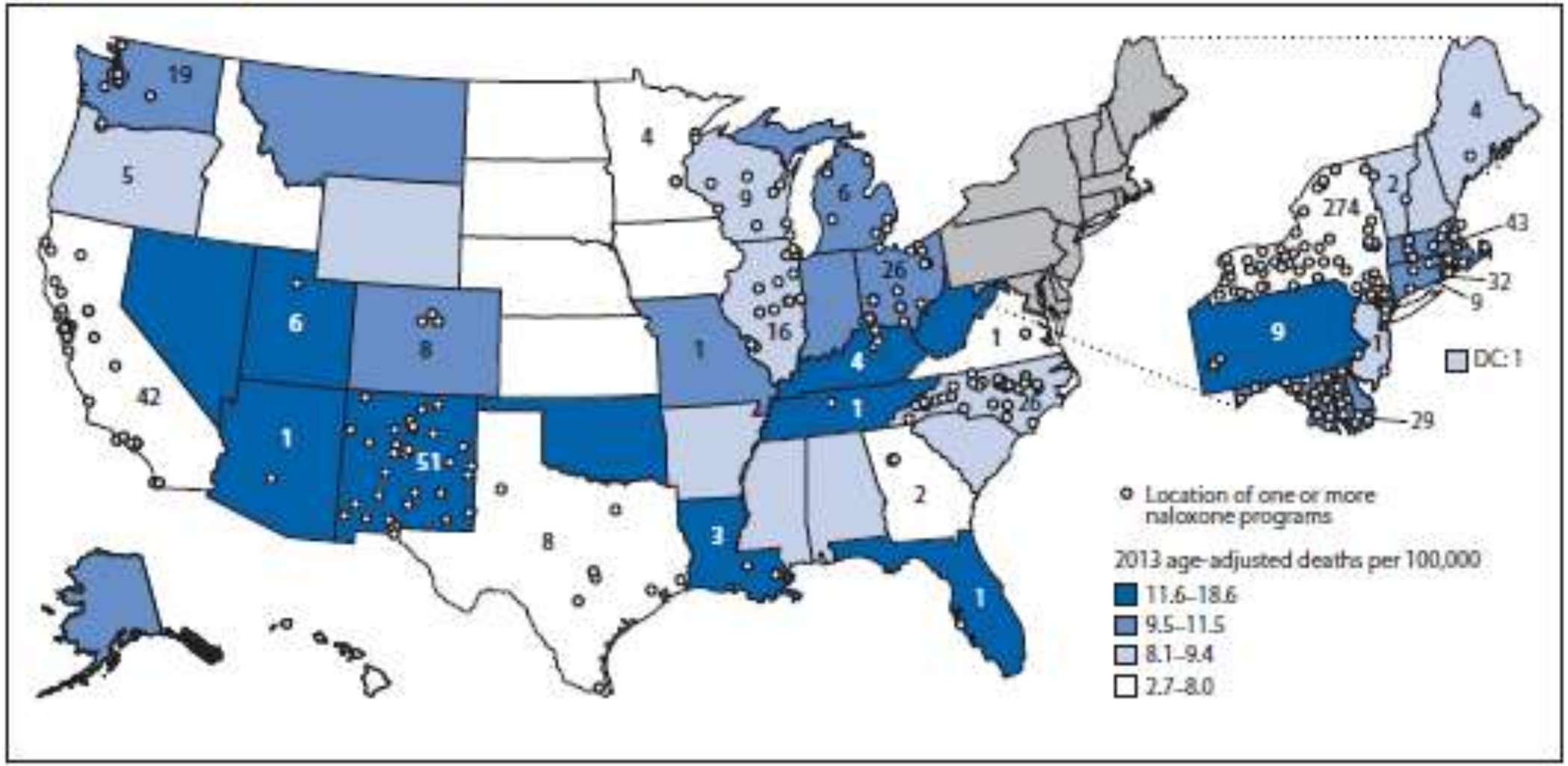
  And/Or
  - Chest Compressions

# Program Survey

- In July 2014, HRC e-mailed an online survey to managers of 140 organizations known to provide naloxone kits to laypersons.
- 136 (97.1%) responded reporting on 660 local opioid overdose prevention sites in 30 states and the District of Columbia
- From 1996- June 2014 the programs reported providing training and kits to 152,283 and receiving 26,463 reports of overdose reversals

Wheeler et al MMWR 6/19/15

FIGURE 2. Number* and location of local drug overdose prevention programs providing naloxone to laypersons, as of June 2014, and age-adjusted rates† of drug overdose deaths§ in 2013 — United States




* Total N = 644; numbers on map indicate the total number of programs within each state.
† Per 100,000 population.
§ CDC, National Center for Health Statistics; Compressed Mortality File 1999–2013 on CDC WONDER Online Database, released January 2015.

# Program participants

93 organizations reported on characteristics of the participants receiving kits, 68 reported on those administering naloxone based on data or estimates

| Characteristic | Received kit % | Administered naloxone % |
|---|---|---|
| People who use drugs | 81.6% | 82.8% |
| Family and friends | 11.7% | 9.6% |
| Service providers | 3.3% | 0.2% |
| Unknown | 3.4% | 7.4% |

Wheeler et al MMWR 6/19/15

# New York City Longitudinal Cohort Study

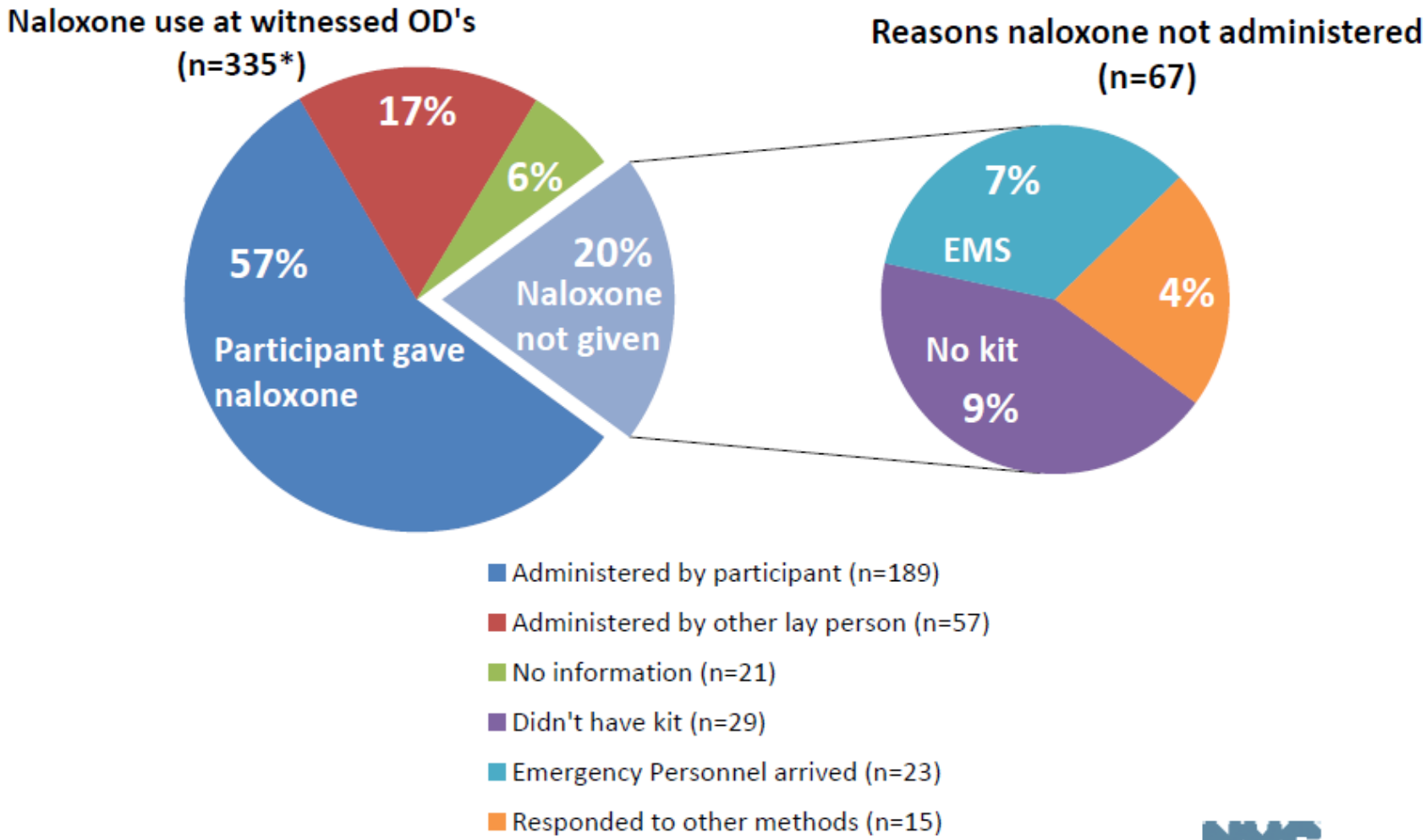
- Recruitment at trainings provided by 6 syringe exchange programs and 2 methadone programs June 2013 - January 2014
- Interviewed at baseline, 3 months, 6 months and 12 months
- 398 were recruited, 80% of whom reported use of an opioid, 33% reported injection in the past year
- 342 (86%) were interviewed at least once in the follow up period (Sept 2013 - Dec 2014)

NYC Department of Health and Mental Hygiene

# Results (a preview)

- 135 (39%) study participants witnessed at least one opioid overdose, with 63% of these participants witnessing more than one overdose
- A total of 338 overdoses were observed
- Naloxone was administered by the study participant in 189 (57%) of cases and by another lay person in an additional 57 (17%) of cases
- In 12 months, of 398 trained individuals, 87 used naloxone and 2 had their naloxone used on them (22 reversals for every 100 trained)

# Naloxone is used in three-quarters of witnessed OD's




*3 OD events were not opioid-related and naloxone use was not indicated

NYC Health

# Use across populations trained



- **AIDS Resource Center of Wisconsin: 2005- 6/2015**
  - Dispensed 11,650 to 8,452 individuals the majority of whom were people who use drugs
  - 4,102 uses of naloxone reported
- **Prevention Point Pittsburgh 2005-2014**
  - Dispensed 2298 kits to 1175 individuals accessing needle exchange services
  - 1167 uses of naloxone reported
- **NYS Division of Criminal Justice Services/Department of Health 6/14-5/15**
  - Over 5,000 officers trained
  - 436 uses of naloxone reported

Scott Stokes, Alice Bell; Personal communication. NYS DOH

# Use across populations trained

| | Total | Users | Nonusers | |
|---|---|---|---|---|
| Massachusetts 2006-2014 | | | | |
| Trained | 32,302 | 21,296 (66%) | 11,016 (34%) | |
| Times kits used | 3,726 | 3,349 (90%) | 377 (10%) | |
| Pittsburgh January-May 2015 | | | | |
| Trained | 457 | 112 (25%) | 345 (75%) | |
| Times kits used | 104 | 103 (99%) | 1 | |

Alexander Walley and Alice Bell; Personal communication

Annals of Internal Medicine | ORIGINAL RESEARCH

# Cost-Effectiveness of Distributing Naloxone to Heroin Users for Lay Overdose Reversal

Phillip O. Coffin, MD, and Sean D. Sullivan, PhD

**Background:** Opioid overdose is a leading cause of accidental death in the United States.

**Objective:** To estimate the cost-effectiveness of distributing naloxone, an opioid antagonist, to heroin users for use at witnessed overdoses.

**Design:** Integrated Markov and decision analytic model using deterministic and probabilistic analyses and incorporating recurrent overdoses and a secondary analysis assuming heroin users are a net cost to society.

**Data Sources:** Published literature calibrated to epidemiologic data.

**Target Population:** Hypothetical 21-year-old novice U.S. heroin user and more experienced users with scenario analyses.

**Time Horizon:** Lifetime.

**Perspective:** Societal.

**Intervention:** Naloxone distribution for lay administration.

**Outcome Measures:** Overdose deaths prevented and incremental cost-effectiveness ratio (ICER).

**Results of Base-Case Analysis:** In the probabilistic analysis, 6% of overdose deaths were prevented with naloxone distribution; 1 death was prevented for every 227 naloxone kits distributed (95% CI, 71 to 716). Naloxone distribution increased costs by $53 (CI, $3 to $156) and quality-adjusted life-years by 0.119 (CI, 0.017 to 0.378) for an ICER of $438 (CI, $48 to $1706).

**Results of Sensitivity Analysis:** Naloxone distribution was cost-effective in all deterministic and probabilistic sensitivity and scenario analyses, and it was cost-saving if it resulted in fewer overdoses or emergency medical service activations. In a "worst-case scenario" where overdose was rarely witnessed and naloxone was rarely used, minimally effective, and expensive, the ICER was $14 000. If national drug-related expenditures were applied to heroin users, the ICER was $2429.

**Limitation:** Limited sources of controlled data resulted in wide CIs.

**Conclusion:** Naloxone distribution to heroin users is likely to reduce overdose deaths and is cost-effective, even under markedly conservative assumptions.

**Primary Funding Source:** National Institute of Allergy and Infectious Diseases.

*Ann Intern Med.* 2013;158:1-9. www.annals.org
For author affiliations, see end of text.

# Cost effectiveness in provision to drug users


Low estimated cost of pneumococcal vaccine in older adults $11,300 (Smith et al 2013)

Courtesy of San Francisco Dept. of Health

# Implementation in NY State

Over 230 sites have registered to distribute free kits provided by the New York State Department of Health

- Syringe exchange/syringe access providers: 22
- Drug treatment providers: 98
- Agencies focused on homeless populations 6
- Law enforcement agencies 35
- Local health departments 20
- Educational institutions 1 (aside from State University of NY police)
- NYS Department of Corrections and Community Supervision : 1
  - Post-incarceration programs: 2
- Primary care
- HIV services

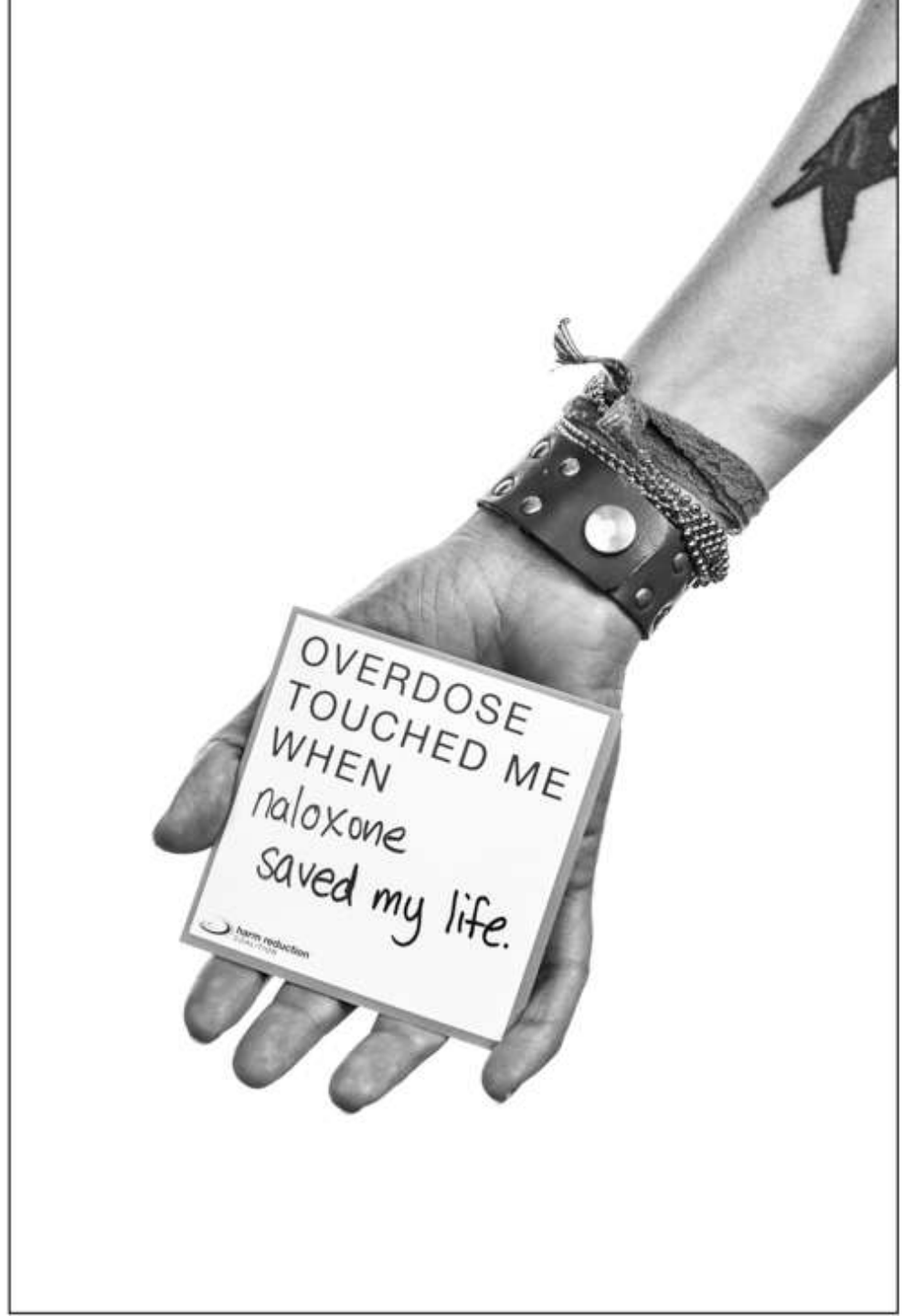
# Department of Corrections and Community Supervision

- DOCCS is committed to training soon to be released inmates at all 54 prisons
- Piloting now at 3 state prisons in New York City; over 400 soon to be released inmates have been trained; 50 have been released with kits
- Standing order for nursing staff in all prisons
- Community Supervision (parole) is supportive
  - Carrying a kit is not a parole violation despite implication of being near people who use drugs

    Using a kit is not a parole violation, the circumstances are important

# Reaching families: examples

- NYS Offices of Alcohol and Substance Abuse Services have twelve 28 day programs which, in addition to patients, provide community trainings
- Learn to Cope: Massachusetts parent groups training parents
- New York City Department of Health & Mental Hygiene training visitors to inmates at Riker's Island; evaluation initiated
- Community Supervision to offer kits to families of people on parole


OVERDOSE
TOUCHED ME
WHEN
naloxone
saved my life.
harm reduction

# Acknowledgements


- New York State Department of Health
- New York City Department of Health and Mental Hygiene
- Opioid Safety with Naloxone Network (OSNN)
- People reversing overdoses